

Claims:

5 1. The invention relates to a covering device for an opening in the outer panel of a motor vehicle, specifically for the spray nozzle passage of a headlight washer system which is equipped with a hinged door on the visible surface of the surrounding outer panel, fitting flush and covering the opening in the closed position and which, in the released position, swings outwards from the opening on the visible surface of the outer panel, **characterized in that** the hinged door (14) is arranged so that it can pivot on a mounting frame (10) which fits securely into the opening (64) and which, in the closed position, completely covers the frame (10) and the opening (64) into which it fits.

10 2. Covering device according to claim 1, **characterized in that** the mounting frame (10) which is set flush in the opening (64) on the inner surface (68) of the outer panel (60), is rigidly fixed to the outer panel (60) by joining devices (74, 76).

15 3. Covering device according to ~~one of the claims 1 or 2,~~ characterized in that the mounting frame (10) set into the opening (64) has a stepped notch (74) all around its facing edges along which an outer stepped surface is next to the outer panel (60) and a projecting inner stepped surface (26) which fits flush into the opening (64), and which is covered over in the closed position by the hinged door (14), preferably leaving an even seam (82) with the surrounding outer panel (60).

20 4. Covering device according to ~~one of the claims 1 to 3,~~ characterized in that the mounting frame (10) has brackets (34, 36) which are fastened to the inner protruding mounting surfaces (70, 72) on the outer panel (60) by means of expanding rivets (74, 76).

a. b 5. Covering device according to one of the claims 1 to
c. b 4, characterized in that the hinged door (14) which covers
b 5 the opening (64) has a trim plate (42) preferably of
thermoplastic, and rigid swivel carriers (44, 46), preferably
5 b made of a fibreglass-reinforced plastic and to which the trim
plate (42) is securely fastened.

Swivel 6. Covering device according to claim 5, characterized
in that the swivel carrier, preferably of one-piece
construction, has a mounting plate (44) next to and rigidly
10 attached to the trim plate (42) and has at least one swivel
arm (46, 46') attached to its unattached end of the swivel
shaft (12) fitted to the mounting frame (10).

b 7. Covering device according to claim 6, characterized
in that the swivel shaft (12) is fastened to the pivot
b brackets (38, 38') close to a plane parallel through the
b mounting frame (10), and the
b 46) is curved with a curvature of about 180° and in the
released position passes outward through the cross section of
the mounting frame (10).

Swivel 8. Covering device according to claim 6 or 7,
characterized in that two swivel arms (46, 46'), at a short
distance from each other, are formed on opposite sides of the
mounting plate (44), and that the free ends of the swivel
arms, provided with bearing holes, can be spread to engage
25 the shaft journals (40, 40') attached to the frame.

a. b 9. Covering device according to one of the claims 6 to
b 8, characterized in that at least one of the swivel arms (46,
b 46') and/or the mounting plate (44) has a centering lug (54,
b 54') which in the closed position projects to the side and
30 b outwards on frame edges (16, 20) opposite the inner facing
edges.

a b 10. Covering device according to one of the claims 3 to 5
a a b ~~Wherein~~, characterized in that the mounting frame (10) at the inner
b stepped surface (26) has several raised sections (30)
b projecting beyond the stepped surface, preferably at the
5 corners and which are designed as spacers for the trim plate
b (42) of the hinged door (14).

a b 11. Covering device according to one of the claims 1 to 6
a a b ~~Wherein~~, characterized in that the swivel arm (14) is held in the
b closed position by the tension of a return spring (50)
10 b pretensioned between the hinged door (14) and the mounting
b frame (10).

a b 12. Covering device according to one of the claims 6 to 6
a a b ~~Wherein~~, characterized in that the mounting plate (44) in the
closed position sits in the inner cross-section of the
b mounting frame (10) and that its rear rests by spring tension
b against a stop face (32) of the mounting frame (10).

a b 13. Covering device according to one of the claims 6 to 13
a a b ~~Wherein~~, characterized in that the rear of the mounting plate (44)
b away from the trim plate (42) is fitted with an angled buffer
b at the edge beading (52) for an operating mechanism (84)
b [TR:sic] of the motor vehicle, extending through the opening
b and so pushing the hinged door (14) outwards.

a b 14. Covering device according to one of the claims 1 to 13, characterized in that the outer panel (60) consists of a
plastic facing on a bumper, and the opening (64) intended for
the spray head (84) of a headlight washer system is stamped
out of the prefabricated bumper facing.

15. Headlight washer system for a motor vehicle with a
spray head (84) which extends from the rest position by a
30 lifting stroke through an opening (64) in an outer vehicle
shell, specifically formed by a bumper facing (60) into the

12

a cont
at a
sink
15
1. spray position, characterized by a covering device according
to one of the claims 1 to 14.

16. Headlight washer system as in claim 15,
characterized in that the spray head (84) has a sliding rib
5 (90) which acts together with the angled buffer (52) of the
hinged door when it is extending.

a
b wherein a
17. Headlight washer system as in claim 15 or 16,
characterized in that the back of the mounting plate (44) of
the hinged door (14) has a recess into which the spray head
10 (84) retracts in the rest position facing forward.

2521760 2521760 2521760 2521760